

Education Division Business Meeting



← Join us. Just \$7 per year.
Tuesday, October 30, 2018



One Mission...

The mission of this Division shall be the education of chemical engineers as it pertains to educational research, scholarly teaching, and broader endeavors encompassing education, such as the Division's programming.

... and another

Today's course objectives:

Information dissemination

Openness to questions and discussion

New business

Who are we?

Executive Committee 2018-2019

Matt Liberatore, Chair

Ben Davis, 1st Vice-Chair

Daniel Lepek, 2nd Vice Chair

Taryn Bayles, Past Chair

Katie Cadwell, Secretary-Treasurer

Board Members

Polly Piergiovanni, Director, 2016-2018

Dan Burkey, Director, 2017-2019

Priscilla Hill, Director, 2018-2020

Kristine Chin, Institute Liaison (AIChE Director of Conferences)

Division Board of Directors (9 total members)

Executive Committee (5 members)

Chair 1st Vice Chair 2nd Vice Chair
Secretary/Treasurer Past Chair

Director1 Director2 Director3
Institute Liaison

Committees (6)

Who we will be...Election Results

New Director Shannon Ciston (2019-2021)

Bylaws update unanimously approved

Added 4th director, 4 year director terms, no even year elections

38 votes cast in final even year election

Next election to be held in 2019 with many openings

Thanks to Taryn Bayles + Nominating Committee

Regular Communication=Monthly Email



Announcements of interest to Ed Div members

- Division business
- Faculty postings (especially teaching-focused)
- Calls for participation (surveys, studies)
- Relevant calls for submission

Submit announcements to Katie Cadwell
(kdcadwel@syr.edu)

Submission deadline end of month

Finances: Looking back on 2017-18

Fund balance in March:

| | |
|------|----------|
| 2015 | \$8,100 |
| 2016 | \$10,000 |
| 2017 | \$10,400 |
| 2018 | \$10,600 |

Revenue sources:

Dues, banquet fees, award sponsorship, interest

Expenses:

Banquet (net neutral), Awards, Domain registration fee, Communication, Mentor/mentee food

Katie Cadwell: kdcadwel@syr.edu

Membership (as of 5/2018)



673 total members (professional and student)

Professional Members (member, senior member, or fellow)

316 in 2018

86% from USA

- States with the most members: Texas (23), Michigan (20), New York (20)
- Over 105 different universities and colleges

International members from 26 different countries

Student Members

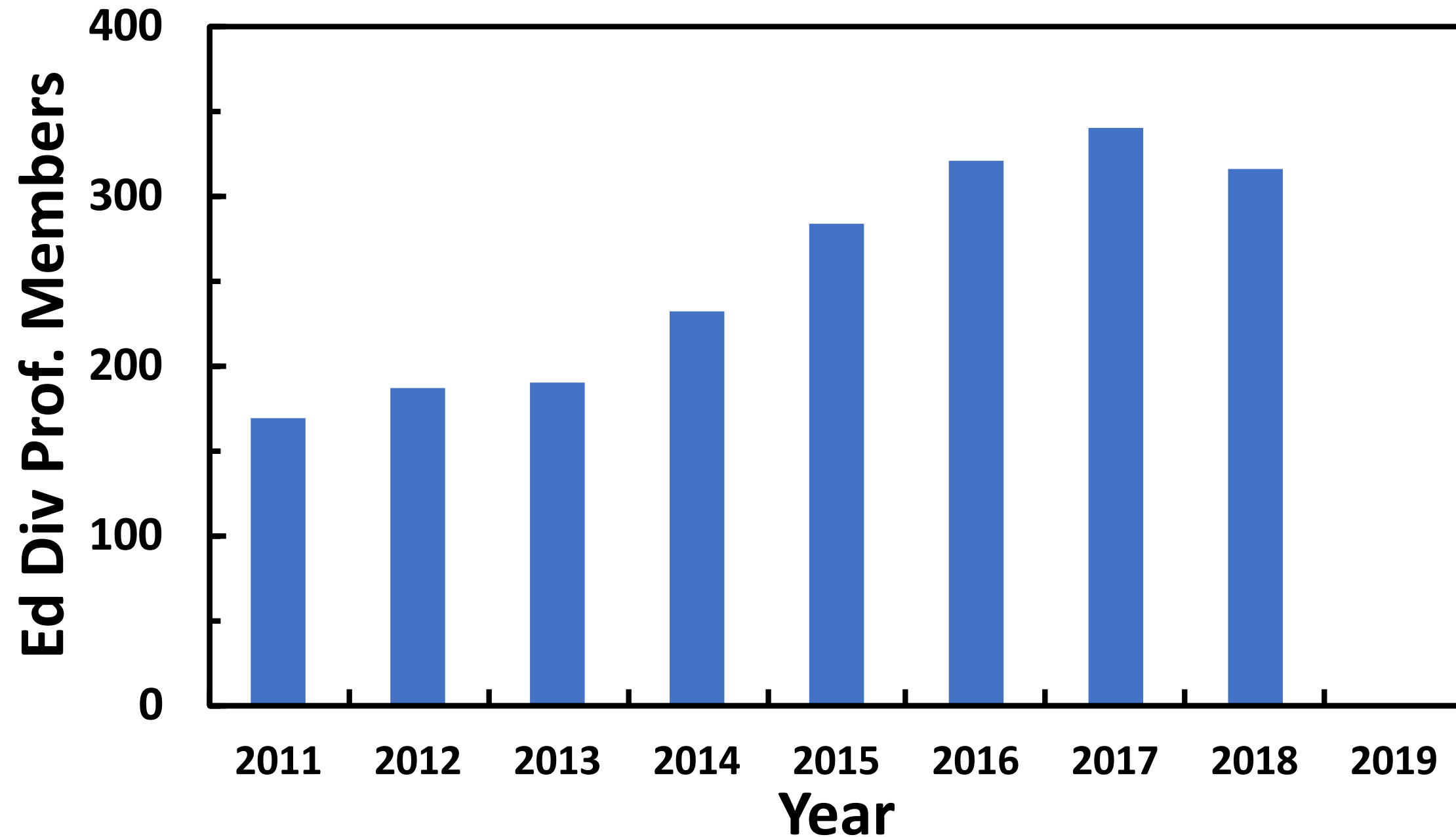
357 grad student members (41% USA/59% International)

International students primarily from India (45) and Pakistan (26)

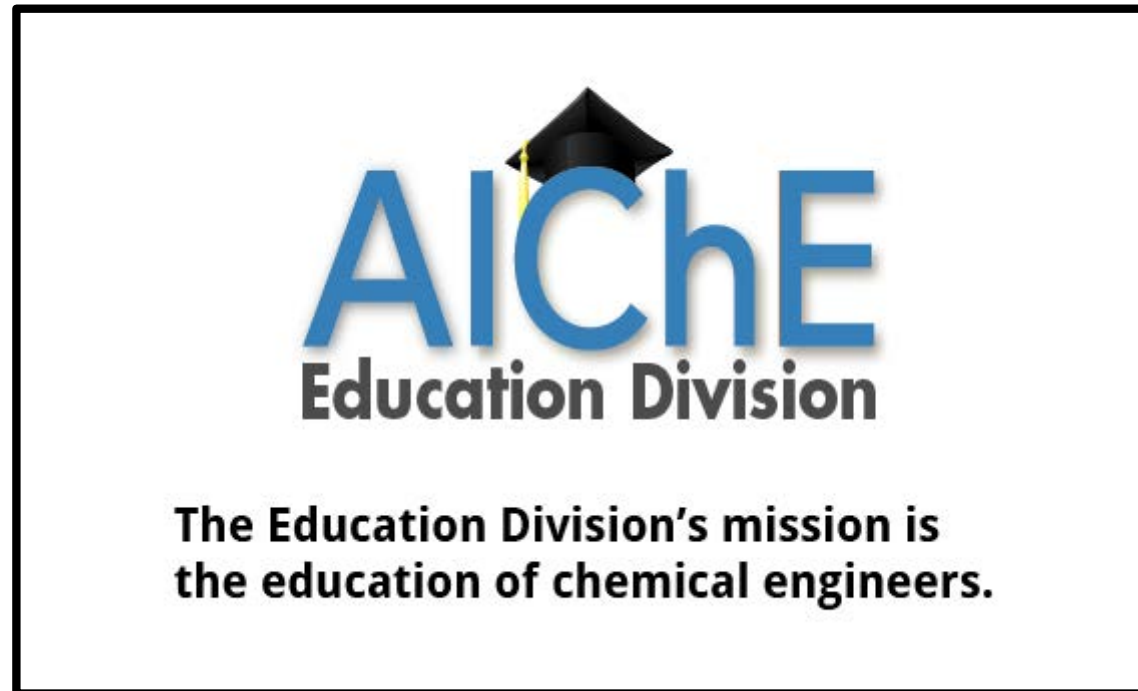
Join by phone 1-800-242-4363 or ONLINE (use the business cards)

Christi Patton Luks, Priscilla Hill, Jonathan Verrett

Membership growing???



Ed Div Business Cards = Awesome



Goal: At least 1 member in every ABET accredited department

Benefits of Ed Div Membership



Networking in sessions at the Annual Meeting and the Education Division Dinner

Learning new education approaches through sessions and webinars

Impacting the chemical engineering education community through presentations and programming at Annual Meeting sessions, course surveys, and the AIChE Education Division Concept Warehouse

Encouraging the development of future faculty through the Future Faculty Mentoring Program

Supporting the recognition of engineering education excellence through awards

Serving as division session chairs and officers and volunteering for other division activities to develop leadership skills

Open to feedback and continuous improvement

2018 Program Highlights



Thank you to our ~50 session chairs and moderators!

We had 75 papers accepted to oral sessions, 32 invited talks, and 20 posters! (127 vs. 101 in 2017)

23 sponsored sessions + 12 co-sponsored sessions

Great sessions remain tomorrow

Looking ahead to 2019

2019 Spring Meeting & 15th Global Congress on Process Safety

March 31st to April 4th in NO, LA

Ed Div will not offer programming

2019 Annual Meeting

November 10th to 15th in Orlando, FL

If interested in chairing a session,
contact Ben: bdavis@cooper.edu



Programming meeting was earlier today

Attend Tomorrow's Program!

| | Wednesday |
|-------|---|
| AM | Department Heads Forum (Invited Talks) |
| AM | Teaching Communication Skills to Engineers (Written, Oral, Data Visualization) |
| AM | Young Faculty Forum (Invited Talks) |
| Lunch | |
| PM1 | ABET Updates and Insights (Invited Talks) |
| PM1 | NSF Workshop I: Highlights from CBET |
| PM1 | Workshop: Teaching Design (Products, Processes, and Ind. Inv.) |
| PM2 | Free Forum on Engineering Education: Graduate Students |
| PM2 | NSF Workshop II: Proposal Writing and Discussions with Program Managers |
| PM2 | Survey Results and Best Practices (Invited Talks) |

Course Survey

2018-19 Survey = Thermodynamics (80+ programs responding)

Presentation Wednesday 10/31 afternoon (3:30 in room 405)

Partnered with NAE on a small “separations” survey (SU 2018)

In discussion with CACHE on partnership on upcoming computing survey

2019-20 Survey Potential Topics:

10 year anniversary of the reincorporated survey committee!

Considering a separate survey on Fluid Mechanics or Heat Transfer or Mass Transfer (in addition to the previous “transport” survey).

Foresee on the horizon looping back to our first topic (1st year ChemE).

Jennifer Cole, Kevin Dahm (co-chair), Laura Ford, Lucas Landherr, David Silverstein, Margot Vigeant (co-chair), Christy West

K-12 Committee



New AIChE-wide K-12 Outreach Committee to be established in upcoming year

Monthly conference calls start in January

Supports all K-12 efforts, and be a central resource and repository for K-12 activities by other committees and divisions

Will lead/organize several K-12 events for AIChE each year

Including the K-12 Outreach Module Competition, to launch at the 2019 Annual Meeting

Seeking committee members, including those interested in leadership positions

Including Education Division liaison

If interested in contributing in any form, contact l.landherr@northeastern.edu

Lucas Landherr, Matt Cooper, Kenny Minneart

Future Faculty Mentoring Program



Mentees: Advertised to the Meet the Faculty Candidate pool

- 54 applicants (34 last year)

Mentors: Advertised to Ed Div, Dept. Chairs, Women's Initiatives Committee, and past mentor/mentees

- 27 mentor/junior mentor applicants (10 last year)
- 6 Female Mentors/Junior Mentors

Will continue to use triad model this year

- Mentor + *Junior Mentor* + Mentee

Initial meeting was on Sunday evening

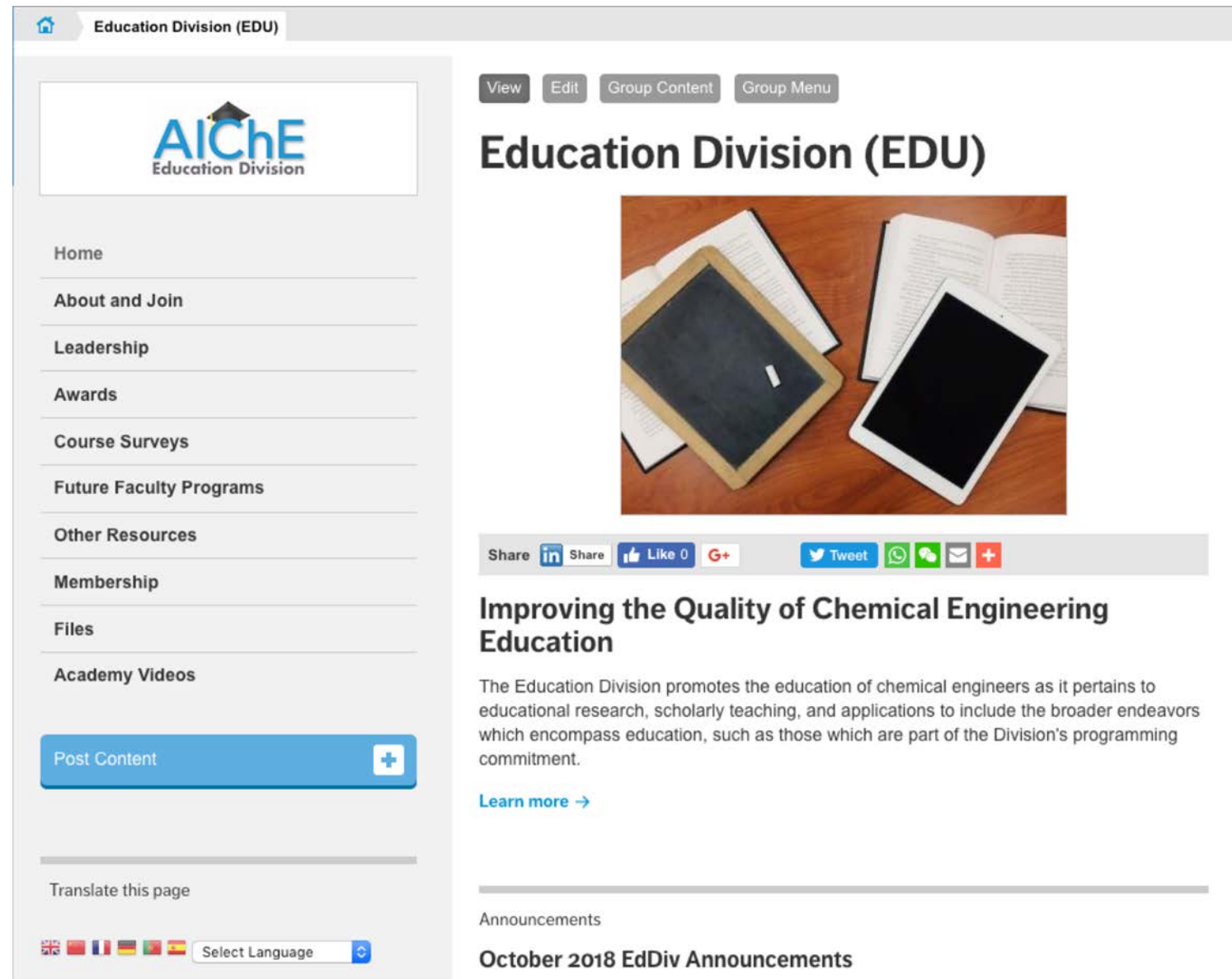
2018-2019 Cohort: 18 Mentees (down from 19), 19 mentors, 10 junior mentors

Observations:

- Back to 1:1 mentor/mentee ratio;
- More applicants = more mentors needed – additional recruiting ideas?
- Focus on ChemE candidates? Candidates from outside ChemE but who want to work in ChemE Dept.

Don Visco, Dan Burkey

Web page cleaned up



The screenshot shows the AIChE Education Division (EDU) web page. The page has a clean, organized layout with a navigation menu on the left and a main content area on the right. The navigation menu includes links for Home, About and Join, Leadership, Awards, Course Surveys, Future Faculty Programs, Other Resources, Membership, Files, and Academy Videos. The main content area features a header with the AIChE Education Division logo and a title "Education Division (EDU)". Below the title is a photograph of a chalkboard, a tablet, and an open book. The page also includes social media sharing options (Share, Like, Tweet, etc.) and a section for "Improving the Quality of Chemical Engineering Education" with a "Learn more" link. At the bottom, there is a section for "Announcements" with the title "October 2018 EdDiv Announcements".

Matthew Liberatore, Katie Cadwell

More Ed Div Webinars

6 completed to date (2 in 2018)

Live attendance 10-35/session

4 Recordings watched ~35 total times

Archived at aiche.org/academy

Always free for Ed Div members

Looking for volunteers (please contact lepek@cooper.edu if you are interested!)

Daniel Lepek, Patrick Abulencia

Always free for members

4 results for : EDU - Education Division : education division

Filter by keywords:

Search



Education Division Webinar: Concept Warehouse

Archived Webinar
Jan 24, 2017

Many engineering educators and industry partners emphasize the need for students to apply their knowledge to new and challenging problems. A lack of conceptual understanding has been shown to severely restrict students' ability to solve new problems since they do not have the foundational...



Education Division Webinar: Zybooks Interactive Textbook for ...

Archived Webinar
Feb 22, 2017

Interactive textbooks provide instant feedback to students as well as instructors. In this webinar, features of an interactive textbook from zyBooks (zybooks.com) for a material and energy balance course were detailed, including scaffolded question sets, animations, homework problems, and challenge...



Education Division Webinar: Chemical Engineering Mobile Apps

Archived Webinar
Mar 28, 2017

Although we have seen a nearly complete shift among chemical engineering students from desktop to laptop computers, it has merely created an incremental change in their education. However, the benefits of mobile devices in engineering education still remain largely untapped. There is a great need...



Education Division Webinar: General Strategy for Development ...

Archived Webinar
Apr 25, 2017

The importance of developing teamwork skills for engineers is abundantly clear, but the means to do so can be prohibitive with regards to factors like cost or time. In this webinar, we will share the details of how our activity is implemented and the impacts and benefits the research have...

Game-based Learning
March 13, 2018

Academic Integrity
April 26, 2018

New: Food/Thanksgiving!
November 20, 2018

All 3 awards given in 2018



Award for Excellence in Engineering Education Research

Milo Koretsky

Award for Service to Chemical Engineering Education

Laura Ford

Award for Innovation in Chemical Engineering Education

Lucas Landherr

Polly Piergiiovanni, Daniel Lepek, Taryn Bayles, Tony Butterfield

2 of 3 awards sponsored in 2018

**Education Division Award for Excellence in
Engineering Education Research**



Chemstations™

**Education Division Award for Innovation in
Chemical Engineering Education**

zyBooks

Special call out for programs in the following areas:

- STEM outreach
- Diversity & Inclusion
- Education
- Technical Innovation
- Localized Activities
- Collaborative Programming and Community Partnerships

2018 Project Reports:

Due December 11th

[\(https://chenected.wufoo.com/forms/m1ox43691jp8iki/\)](https://chenected.wufoo.com/forms/m1ox43691jp8iki/)

Story telling (photos, videos, testimonials, etc.)

2019 First Cycle of Funding

- October 1 Cycle opens for proposal submissions
- December 1 Submission deadline for grant proposals
- February 2 Announcement of grants funded

Proposal Submissions:

https://aiche.formstack.com/forms/aiche_foundation_funding_proposal_submission_form

Successful proposals

- ✓ Support the Foundation “**Doing a World of Good**” transformative priorities
- ✓ Have been thorough reviewed with your **staff liaison** who will:
 - Check new business eligibility and coordinate review
 - Collect endorsement letter from Operating Council leadership & AIChE executive leadership
 - Review and verify program resource estimates, staff labor hours, honorarium fees, reception costs, etc.
 - Answer your questions and guide you through the proposal development process
- ✓ Document previous program impact (photos, videos, testimonials, etc.)

Other items

Institute Update – Kristine Chin

Special Thanks

Outgoing Division Director Polly Piergiovanni

New Business

The floor is open

Please Join Us for the Ed Div Dinner!



Ticketed event

Immediately after this Business Meeting we will leave as a group

Venue is about a 10 min walk (0.5 mile):

Lidia's Italian

1400 Smallman St

Pittsburgh, PA 15222